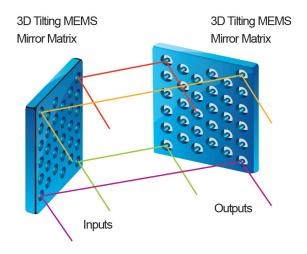
# 32X32 MEMS 3D RACKMOUNT MATRIX OPTICAL SWITCH

DiCon's MEMS Rackmount 3D Matrix Optical Switch is a proprietary optical switch structure that allows the simultaneous connection of multiple input to output fibers in a non-blocking, all-optical cross-connect configuration.

# OPERATING PRINCIPLE (ANY PORT TO ANY PORT FUNCTIONALITY)



### **FEATURES**

- Available in any MxN Size up to 32x32
- Proven DiCon MEMS Technology
- Easy-To-Use Rackmount Housing
- Ethernet or RS232 Interface

## **APPLICATIONS**

DiCon Fiberoptics offers a rackmount version of the 3D Matrix Optical Switch for research and production environments, and is used to share valuable resources in a automated, reliable manner.



# 32X32 MEMS 3D RACKMOUNT MATRIX OPTICAL SWITCH

#### OPTICAL SPECIFICATIONS<sup>1</sup>

PARAMETER		RATING	
Insertion	24x24	0.8 dB typ.	1.4 dB max.
Loss <sup>2</sup>	32x32	0.8 dB typ.	1.4 dB max.
Crosstalk		-70 dB typ.	-55 dB max.
Back Reflection		-55 dB typ.	-45 dB max.
Switching Time		15 ms typ.	20 ms max.
TDL		0.1 dB typ.	0.4 dB max.
WDL <sup>3</sup>		0.1 dB typ.	0.4 dB max.
PDL		0.08 dB typ.	0.25 dB max.
Repeatability <sup>4</sup>		0.01 dB typ.	0.06 dB max.
Durability		10 <sup>9</sup> cycles min.	
Optical Power		500 mW max.	
Operating Temperature		-5 to 70°C	
Storage Temperature		-40 to 85°C	
Fiber Type		9/125 μm Single-mode	
1 All enecifications are without connectors for the set wavelength hand			

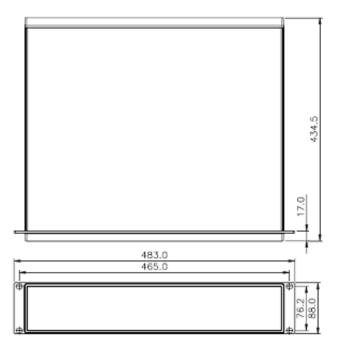
<sup>1.</sup> All specifications are without connectors for the set wavelength band index.

Note: Each wavelength band has it's own wavelength index, which can be set to optimized the optical performance for that band. Only one wavelength index band can be selected at a time and it applies to all the ports on the module.

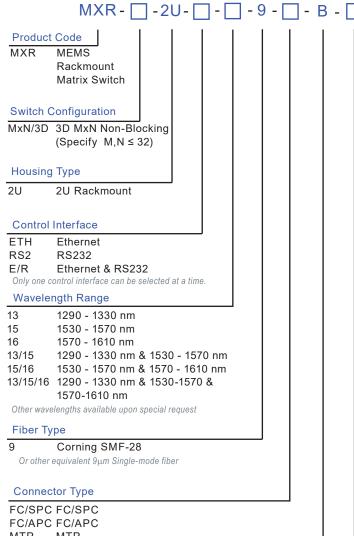
- 2. IL is measured at CWL for the set wavelength index at 23°C +/- 5°C. Operation in 1290-1330nm or 1570-1610 nm bands add 0.1 dB to the typical IL and add 0.2 dB to the maximum insertion loss.
- 3. WDL is measured from CWL in a +/- 20nm range at 23°C +/- 5°C.
- 4. Repeatability is defined within 100 cycles.

#### MECHANICAL DIMENSIONS

#### **2U 19" RACKMOUNT CHASSIS**



#### ORDERING INFORMATION



MTP MTP

Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

#### Port Type

**Bulkhead Adaptors** 

#### Port Location

Front Panel Rear Panel

#### **ELECTRICAL SPECIFICATIONS**

PARAMETER		RATING	
Control Type		Ethernet or RS232	
Input Voltage		90 - 264 VAC	
Connector	Ethernet	RJ45	
Туре	RS232	9 Pin DB9	